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ABSTRACT

This guide presents research-based teaching strategies to assist teachers in implementing the Essential Learning Skills--symbol systems, literal meaning of information, implied meaning of information, evaluation of content and use of communication skills, expression of ideas, reasoning and study skills--in all curriculum areas. The first of three sections discusses reading across the curriculum, and presents before, during, and after reading strategies to increase reading comprehension and retention. The next section on instructional aids consists of: (1) before reading instructional aids, including questioning strategies, hypotheses development, vocabulary exercises, graphic outlines, and a list of alternative learning methods; (2) during reading instructional aids (study and reading guides); (3) after reading instructional aids, with summarizing strategies and question types; and (4) reading to learn, including critical reading activities, test-taking strategies, and tips for faster reading. The last section of the booklet discusses writing across the curriculum, and presents writing to learn activities and suggestions for teaching the writing process of prewriting, drafting, revision, editing, presentation, and evaluation. (MM)

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Dear Educator,

As we move ahead with the Oregon Action Plan for Excellence, a number of districts are developing effective strategies to implement the Essential Learning Skills in all curriculum areas.

One district, Grants Pass School District 7, has packaged their material in an easy-to-use and effective booklet which the Oregon Department of Education is happy to make available for use statewide. These research-based strategies will assist teachers in making the Essential Learning Skills come alive in their classrooms.

It is through the sharing of locally developed resources such as these, that the Essential Learning Skills continue to be a "made in Oregon" product.

Cordially,

Verne A. Duncan
State Superintendent
of Public Instruction

This document was prepared by staff members of the Grants Pass School District under contract with the Oregon Department of Education.

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What are Essential Learning Skills?

Oregon's Common Curriculum Goals are composed of:

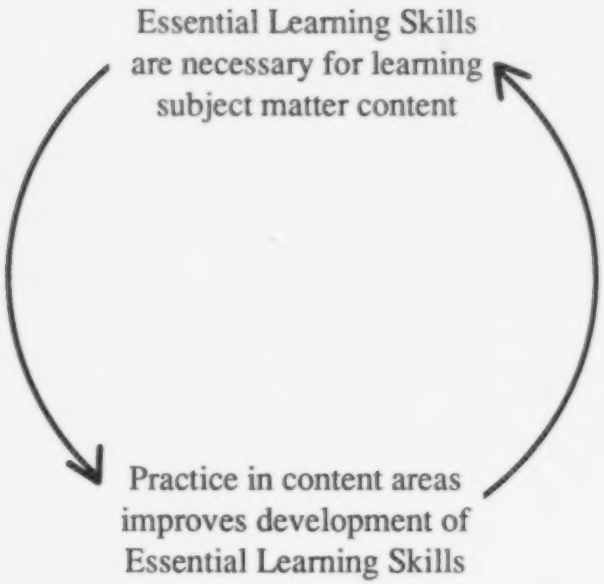
- Common Knowledge and Skills specific to each content area
- Essential Learning Skills (skills to be taught in every content area)

Seven major categories of Essential Learning Skills have been identified:

- Symbol systems (words, numbers)
- Literal meaning of information
- Implied meaning of information
- Evaluation of content and use of communication skills
- Expression of ideas (writing and speaking)
- Reasoning skills
- Study skills

Teachers will be responsible for developing these skills in their classes.

WHY ESSENTIAL LEARNING SKILLS ACROSS THE CURRICULUM?



"Better learning occurs when improvement is a collective rather than a solo enterprise."

READING ACROSS THE CURRICULUM

Although the word "reading" does not occur in Essential Learning Skills, reading skills are basic to all of them. Strategies included in this section will help students understand and remember what they read in content areas.

READING ACROSS THE CURRICULUM . . .

WHAT RESEARCH TELLS US

WHAT IS . . .

- Students in secondary school do not continue to gain in reading skills as they do in elementary school. In fact, there is a DECLINE in their ability to draw inferences from what they read.
- Studies show that there is very little effective independent learning from textbook reading occurring in most secondary subject matter classes.
- Most students don't really study a text. They simply try to memorize and/or find answers to questions.
- Teachers generally ask students only detail and literal questions about what they have read, testing rather than teaching from the text.
- Many students lack the strategies they need to cope in subject matter classrooms.

WHAT SHOULD BE . . .

- **BEFORE, DURING and AFTER READING** strategies should be used to increase COMPREHENSION and RETENTION. Without these, reading produces little learning.
- The greatest gains in comprehension and retention are produced if students learn to:
  - INTERACT with
    - text,
    - teacher,
    - other students,

    and
  - QUESTION themselves about the text and their own thinking processes (metacognition).
- Students benefit most from independent reading if they are taught SPECIFIC STEPS in TEACHING THEMSELVES from their reading.
- Students need to be taught a VARIETY of approaches to reading for different kinds of content.

BEFORE READING STRATEGIES

WHY?

Because students are better able to
- focus on what is important.
- receive information and process it into a frame of reference.

WHAT ARE THEY?

1. READ FOR PURPOSE
   Let students know why they're reading (discussion, report, etc.). Have them write questions they expect will be answered when they read (see pp. 8, 13, 14) or develop hypotheses to be tested during reading. See p. 9.

2. RELATE READING TO PRIOR KNOWLEDGE
   Before the students read, find out what they already know about the subject and where they learned it . Include broad concepts, vocabulary (see pp. 10 - 12), and specific information. Try to relate as much of what they are expected to learn as possible to what they already know.

3. SURVEY ORGANIZATIONAL FEATURES OF TEXT
   Have students survey organizational features of the text (titles, subtitles, graphics, advance summaries or other organizers or references).

4. PREDICT TEXT STRUCTURE
   Help students predict structure of text (e.g., compare/contrast, problem/solution). See pp. 13 - 16.

5. DECIDE ON RATE OF READING
   Determine whether it is necessary to read for detail or to skim for the general idea of lighter reading. See p. 30.

6. MONITOR BEFORE READING ACTIVITIES
   Monitoring is necessary to make sure activities are carried out effectively and efficiently.

7. USE ALTERNATIVE LEARNING METHODS
   When students cannot comprehend text material, consider using alternatives. See p. 17.

DURING READING STRATEGIES

WHY?

Because students are able to
- confirm or refine predictions.
- extend their focus to manageable parts of the reading.
- discover areas of misunderstanding and clarify meaning by self-questioning or group discussion.

WHAT ARE THEY?

1. READ ACTIVELY
   As students read, have them identify and note the topic sentence or major ideas of specific paragraphs, make inferences and evaluate the importance of what is being read.

2. READ FLEXIBLY
   Vary reading rate according to difficulty of reading; pay particular attention to important concepts, skip over others. See p. 30.

3. READ CONSTRUCTIVELY BY USING A START/STOP PROCESS
   After students read a segment of the text, have them stop and assess what they have learned and understood. Then have them reread difficult sections for any needed clarification. New questions and predictions for the next portion of the text should be raised before reading continues. For students who are having difficulties, this start/stop process is very important to avoid memory overload and to keep misunderstandings in one segment of the text from preventing or hindering comprehension in subsequent portions. See p. 28.

4. USE SELF-MONITORING TECHNIQUES
   Students should ask themselves if they fully understand the concepts, vocabulary, and instructions in the text; if the text is consistent with their predictions and prior knowledge; and if there are gaps in the information presented.

5. USE STUDY GUIDES
   For particularly difficult or poorly organized sections of textbooks, study guides could be introduced. See pp. 20 - 22. These are most effective when used with small groups or teacher directed discussion.

AFTER READING STRATEGIES

WHY?

Because students are encouraged to
- reread, discuss and reinforce new ideas within context of their own experience. This leads to better comprehension and retention.

WHAT ARE THEY?

Directly After Reading

1. CLARIFY READING

Provide opportunities for the students to fill in gaps in the information and clarify anything that they do not understand. Have them recall key ideas and facts from the texts and distinguish between fact and opinion, if applicable. All responses should be accepted; however, students should be able to defend their selections with evidence from the text or other information. Discuss outcomes of predictions. Using the questions and categories in the frame or graphic outline (see pp. 13 - 16), work in whole or small groups to organize and categorize the information. Discuss relationships and determine significance and accuracy of information and ideas used to draw conclusions.

2. RESPOND CREATIVELY TO READING

Have students use reading as a stimulus for creative writing.

3. SUMMARIZE READING

Use basic summary strategies (see p. 24) or construct a summary of the information in the graphic outline. See pp. 15 - 16.

Sometime After Reading

1. INTERPRET READING

Use higher level questions in discussion just before testing to increase student comprehension. See p. 25.

2. PREPARE FOR EVALUATION

Have students write questions for other students to answer. Some could be used as test questions.

INSTRUCTIONAL

AIDS

BEFORE READING

INSTRUCTIONAL AIDS

BEFORE READING . . .

QUESTIONING STRATEGIES

Why Use Questioning Strategies?

Questioning strategies are important before, during and after reading. When questions are in mind **before** reading, students have a purpose for their reading. They are less likely to be distracted and are more likely to focus on important aspects of the text. As students read to answer questions they have asked themselves, they become more actively engaged in the reading process. They also read more effectively, efficiently and critically.

Asking questions inserted in the text (adjunct questions) **during** reading encourages readers to stop and think about what they are reading. **After** reading questioning improves comprehension. Teachers can facilitate learning by asking application or inference questions if the text asks the same type of questions and little time elapses between questioning and testing.

How to Teach Students to Ask Questions

The best way to teach students to ask questions before and during reading is to have them look at text headings, subheadings, and captions. Have them practice turning these headings into questions. Try to lead them into asking questions that compare, contrast, analyze, synthesize and evaluate important aspects of the test. Bloom's taxonomy may be used as a guide for asking questions of increasing difficulty. If a subheading is "Four Models of the Mind," instead of asking, "What are the four models of the mind?", have students ask what features might be unique to each model or common to each model. They might also decide on criteria they could use to evaluate the relative worth or utility of each model.

DEVELOPING HYPOTHESES

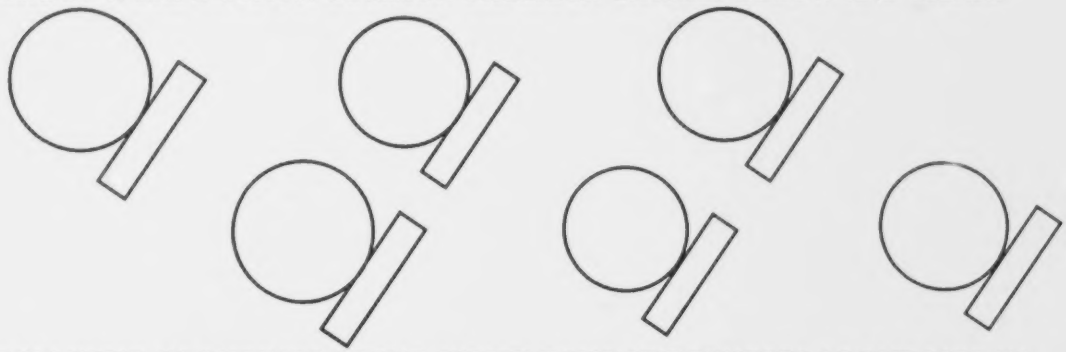
Developing hypotheses and testing them can help clarify meaning and improve reasoning skills. In the social studies example below, students group vocabulary words into six categories and label them. Since overlapping can occur, there are no right or wrong answers. From the six groupings, students develop four hypotheses about life in colonial America and then read the text to prove or disprove them.

COLONIAL AMERICA IN THE 1750'S

LISTED BELOW ARE A NUMBER OF WORDS COMMONLY USED IN THE COLONIES IN THE 1750'S.

apprentice	community	flint	leather	saint
ax	congregation	freeman	meditation	saw
baptism	conversion	harvest	oak	sow
barrel	corn	hoe	pelt	squash
bench	faith	husbandry	pewter	trap
clog	fall	keg	pray	whipping

GROUP WORDS WITH A COMMON THEME IN CIRCLES BELOW AND LABEL



FROM YOUR GROUPINGS ABOVE, WRITE FOUR HYPOTHESES ABOUT LIFE IN COLONIAL AMERICA. READ TEXT TO PROVE OR DISPROVE EACH HYPOTHESIS.

HYPOTHESIS:

HYPOTHESIS:

HYPOTHESIS:

HYPOTHESIS:

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SAMPLE VOCABULARY EXERCISES

An isolated introduction of "new" or difficult words with definitions does little to improve comprehension. The following exercises allow students to understand the meaning of new words by developing relationships and background information. Since it is not possible to teach students all vocabulary in a text, words should be selected that relate most directly to new ideas and are not taught fully in the text.

Teacher Diagram

After selecting words that are necessary for student understanding, arrange them in a diagram to show relationships of ideas in the unit. On the first day of the lesson, the teacher and students discuss general concepts in terms familiar to the students. Using an overhead or chalkboard, the teacher writes out the previously developed diagram. Students discuss why they think words were arranged in that manner.

Student Predictions

Before reading a new section, students look at chapter titles and headings. From these, they predict words that will be included in the selection. The teacher notes them on the board or overhead. After reading the assignment, the students report whether those words were actually found in the reading. Here, the emphasis is on encouraging students to use words they **think** are related, rather than words the teacher has chosen. When students bring their own experience and information to the topic, they realize how prior knowledge applies to new learning, and they improve their ability to associate words.

Semantic Mapping

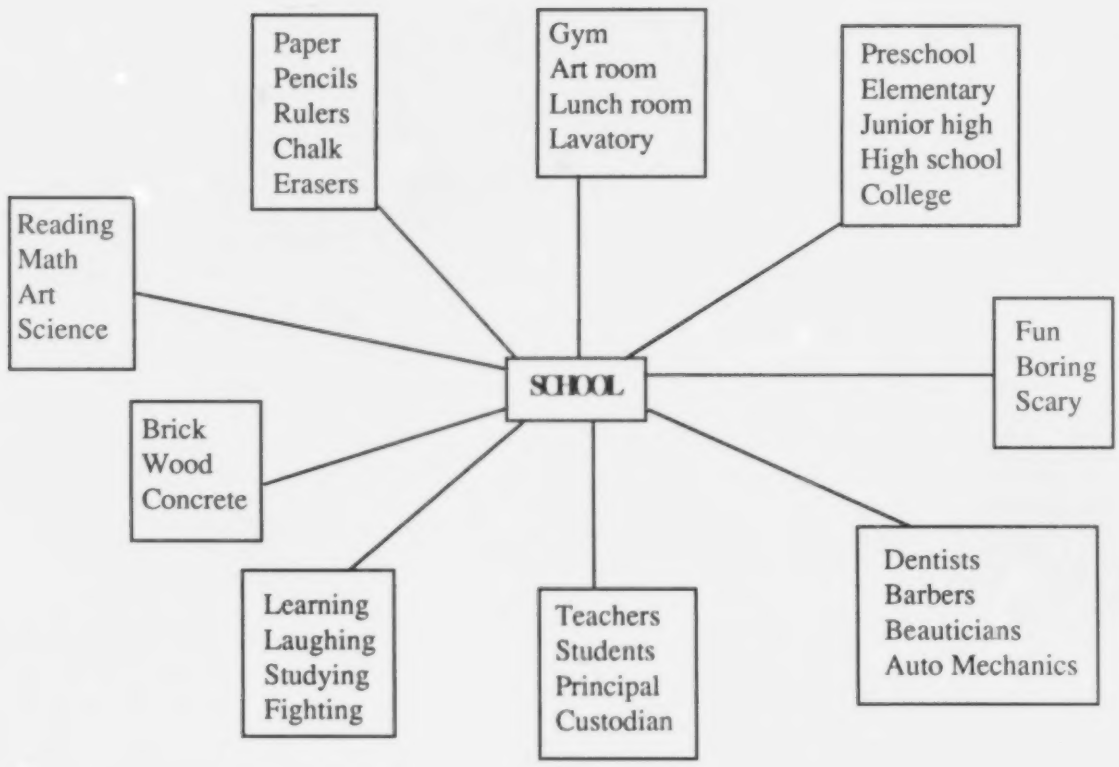
Semantic feature analysis capitalizes on a reader's prior knowledge and the ways it is organized. It stresses relationships among concepts within categories.

1. **Select** a word central to the story to be read, or from any other source of classroom interest or need.

2. **Write** the word on the chalkboard.

3. **Ask** the class to think of as many words as they can which are in some way related to the word you have written, and jot them on paper, in categories.

4. Have individuals **share** the words they have written and, as they do, write them on the board and attempt to put then into categories. For example, if the word you wrote on the board was "school", the compiled semantic map might look like the following figure.



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5. Next, you might want to **number** the categories and have the students **name** them.

6. As with semantic association, **discussion** is crucial to the success of semantic mapping. The meanings and use of new words, new meanings for known words, seeing "old" words in a new light, and seeing the relationships among words are the desirable (and inevitable) outcomes of semantic mapping. Be ready for some disagreement; you have put a word in one category when it could as sensibly have been put in a different category. Some words will end up in several categories. New words will typically be added as the discussion ensues.

7. As the discussion concludes, it is often necessary to **focus** attention on one or two categories mapped from the central concept. For example, related to the semantic map in the figure you may need to say something like this:

> "We have prepared quite a map about school and have listed words in nine categories. That's great! The selection we're going to read, though, is about the different kinds of schools to be found in our society. It describes public, private and parochial schools as well as trade schools and specialty schools. Which two category lists on our semantic map contain words descriptive of different kinds of schools? Let's talk about these words.

This type of focusing discussion, which directs students' attention to specific words on the map, is appropriate when you are using semantic mapping as a selection-specific before reading activity. Often semantic mapping is done for general vocabulary development instead of before reading (e.g., using a current event, holiday, film, etc. as the central concept) and then focusing is not a necessary part of the discussion.

Seeing "old" words in a new light and seeing the relationships among words are the desirable and inevitable outcomes of semantic mapping

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PREDICTING TEXT STRUCTURE

When students are able to predict text structure, they can develop strategies to better comprehend the material. They may also use this information to establish a purpose for reading.

ACTIVITY

Discuss frame categories and questions (see below) or develop a graphic outline for a specific category. See pp. 15 - 16. Over a period of time, students will learn the frame questions of categories for each text structure so eventually this information becomes a part of their prior knowledge.

Sample Frame Questions/Categories

1. *Problem/Solution.* Much writing in social studies and literature texts involves problems and solutions such as the national debt. In order to understand a problem and solution fully, it is necessary to answer the following frame questions: What was the problem? Who had the problem? Why was it a problem? (What were the negative effects?) What attempts were made to solve the problem? (Jones, 1985b) What problem solving strategies were used?

2. *Concepts.* Biology, social studies, and science texts devote much time to classifying something such as an insect-eating plant. Good instruction in such instances often involves addressing the following questions: What is the thing? What category does it belong to? What are its critical attributes? (How does it work? What does it do? What are its functions?) What are examples of it? And, where appropriate, what are some nonexamples? (Markle, 1975)

3. *Sequential Texts.* Many texts describe the stages of something (e.g., the stages in the life cycle of a primate), steps in a procedure (e.g., how to neutralize an acid), or a sequence of events (e.g., how feudalism led to nation-states). In such instances, it is important for the teacher and students to address the following categories: identify the name of the object, procedure or initiating event; describe the stages, steps, series, showing how one leads to another; and describe the final outcome. See p. 15 for example of a causal chain frame graphic outline.

4. *Description of One Thing.* Descriptive frames and categories depend somewhat on the nature of what is being described. In geography, for example, regions are usually described within the following five super-ordinate categories: land (physical features, climate, and natural resources), people (social/cultural, educational, religion), cities, economy, and government. (Armbruster 1980, Armbruster and Anderson 1985, Herber 1978, Stauffer 1975). Processes (e.g., the formation of limestone) involve a different set of categories; what the name of the process is, when it takes place and its duration, where the process occurs, and the functions of the process (Lunzer, Davies, and Green 1980). Hanf (1971) has developed an interesting way of outlining descriptions of one thing and for concepts, called spider mapping. See p. 16.

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5. *Compare/Contrast Two or More Things.* Like description, the categories for comparison and contrast differ according to what is being compared or contrasted. However, comparisons should always establish clearly how the things (people, places, events, ideas, etc.) are similar, giving examples or further description to support the generalization. Similarly, contrast analyses must state explicitly all the ways in which the things are different as well as illustrate each difference (Jones, Amiran, and Katmis, 1985).

6. *Goal/Action/Outcome.* Since much of human behavior in history and literature is goal oriented (e.g., the actions of the Europeans as they colonized the Americas), a useful way to understand such behavior is to identify the goals, actions, and outcomes of the person or group (Armbruster and Anderson 1985).

7. *Interaction Frames: Conflict/Cooperation.* Much of history and good literature involves the interaction of two or more persons or groups. To comprehend the nature of their interaction, the key questions are: What are the persons/groups? What were their goals? What was the nature of their interaction: conflict or cooperation? How did they act and react? What was the outcome for each person/group? (Jones 1985b)

8. *Interaction Frames: Causal Interaction.* To understand the causal interaction of a complex event such as an election or a nuclear explosion, or a complex phenomenon such as the causes of juvenile delinquency or learning disabilities, the critical task involves answering the following questions: Where are the factors that cause X? Which ones are most important? How do the factors interrelate? Do some factors occur before others? Are the factors that cause X initially the same as those that account for its persistence? Causal interaction information is usually outlined in a logic tree or network consisting of nodes (the causal factors), with lines showing the relationships between factors. That is, intersecting lines indicate a causal relationship.

9. *Proposition/Support.* This type of paragraph structure pervades all of expository prose. It consists of a generalization, statement, argument, theme, or thesis supported by reasons, opinions, facts, quotes, examples, and/or references. Key frame questions are: What is the generalization? How is it supported? Additionally, it is important to consider levels of information within this type of paragraph. Often such paragraphs contain major and minor ideas as well as one or more levels of supporting information.

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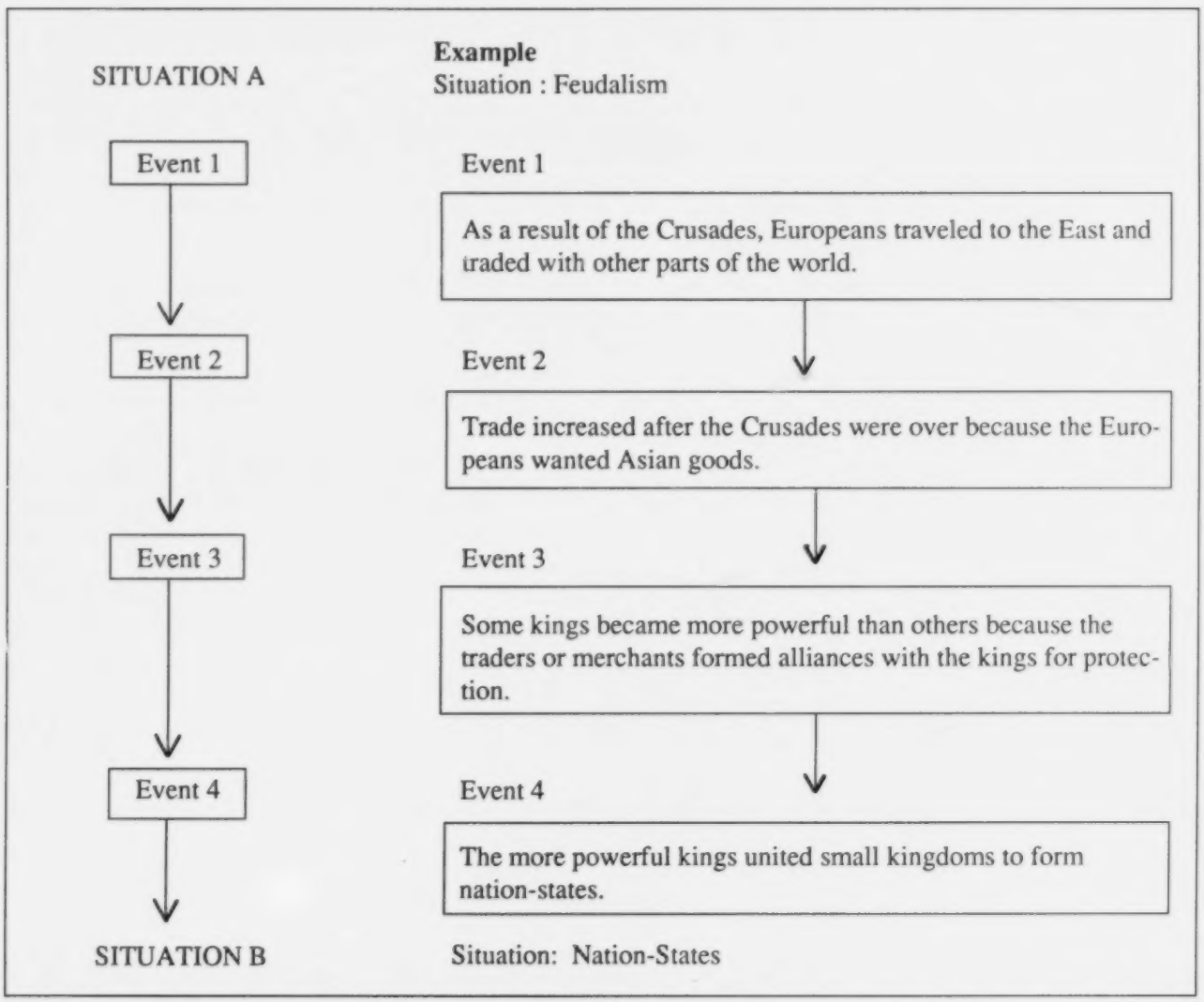
SAMPLE GRAPHIC OUTLINES

(1) Sequential Text: Causal Chain Frame Example

Like all frames, a causal chain frame can be used to:
- **Survey/Predict**: guide or focus predictions and set a purpose for reading.
- **Read**: take notes on important information.
- **Construct**: organize the detailed information into main ideas after reading the text.

Question for the Causal Chain Frame with the Related Diagram.
Why does one situation change to another situation?


SITUATION A
Example
Situation : Feudalism
Event 1
Event 2
Event 3
Event 4
Event 1
As a result of the Crusades, Europeans traveled to the East and traded with other parts of the world.
Event 2
Trade increased after the Crusades were over because the Europeans wanted Asian goods.
Event 3
Some kings became more powerful than others because the traders or merchants formed alliances with the kings for protection.
Event 4
The more powerful kings united small kingdoms to form nation-states.
SITUATION B
Situation: Nation-States

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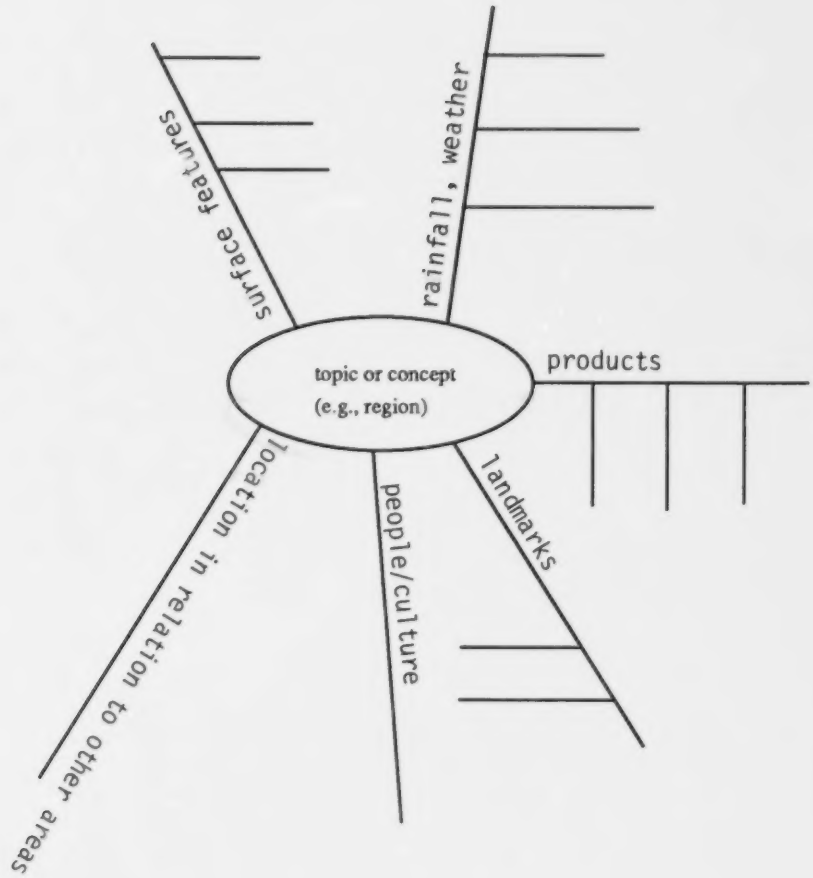
(2) Description of One Thing: Spider Mapping Example



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ALTERNATIVE LEARNING METHODS

Alternative learning methods can help students who have difficulty acquiring information from the text obtain the same information in a different, more understandable way.

In developing an alternative learning method, it is important to outline the major concepts that are important no matter what means the student uses to acquire the information. Vocabulary concepts and skills can be determined through a skills analysis.

Many different media forms can be used depending on what is available. Some possibilities are:

- film strips
- cassette tapes
- records
- computer programs
- lower level text
- higher level text
- rewritten version (i.e. skill cards)
- video tapes

In order for this approach to be effective, students should be guided through a step-by-step process. This could include questions and answers, vocabulary development, and follow-up activities or application.

DURING READING

INSTRUCTIONAL AIDS

DURING READING . . .

USING STUDY GUIDES

Reading can be guided more precisely by asking questions about specific parts of the chapter. Teacher-posed questions should help students identify main ideas and reinforce the general flow of the chapter. They should not focus on insignificant details or be scrambled in order. Some teachers feel guided reading is too immature for middle and senior high school students, but that assumption is false. Handled properly, students will respond well.

Questions listed in written form are called study guides. However, study guides can incorporate other elements of the content teaching plan besides questions (i.e, vocabulary development, follow up activities). They can help students comprehend text at all grade levels, but are especially helpful beyond the elementary grade.

Students must be taught how to use study guides. They should know the purpose of the guide (to direct reading and identify main ideas, stimulate thinking, or provide for individual differences).

FACTORS TO CONSIDER IN DESIGNING STUDY GUIDES

Since study guides can become boring to students and time consuming for teachers to develop, keep in mind the following factors:

- A clear purpose must be identified.
- Format should be simple and uncluttered with clear, concise directions. Concentrate on sections of the text containing difficult or important concepts.
- Formats should be varied. Questions are important, but other activities can be included. Organization of the text (compare/contrast, cause/effect, time order, simple listing) can also be used to vary formats.
- Individual students will differ in the amount of help and direction needed to complete the guide. Since the goal is to increase comprehension, provide as much information as necessary for poor readers (i.e., page, paragraph and line number).
- The value of each study guide format should be assessed as it is being used by students. Revise guides as the need arises.
- Study guides should be challenging. They can be supplemented with reinforcing activities and additional reading suggestions.
- Study guides should not be graded. This eliminates the need for cheating or copying.
- Small groups and teacher directed discussion make study guides most effective.

STUDY GUIDE EXAMPLES

Example 1.
CHAPTER 17 - DEVELOPMENT OF A NEW SPECIES

	QUESTIONS	ANSWERS
A.	What causes new genes?	Mutation
	1. How do new genes arise by mutation?	At cell division, the DNA molecule in the cell does not duplicate itself Mutation rate affected by temperature, chemicals, radiation
B.	How do changes in genes affect population?	Provide a great amount of genetic variety in organisms
	1. How frequently do certain genes occur in population?	Variable...prediction of frequency based on assumptions from which conclusions are drawn

New words and concepts	Meaning
mutation	When the new gene is not an exact copy of the original
population genetics	Studies of genes of an entire population

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Example 2.
COMPARING THE VIEWS OF JEFFERSON AND HAMILTON

Points to compare	Jefferson	Hamilton
Purpose of government		
Type of nation U.S. should be		
The Role of State Governments		

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Example 3 SCIENCE READING GUIDE

Paragraph 10 (Yes, that's right, Paragraph 10). Read paragraph 10 first and keep it in mind as you follow the exercises on this sheet. Now proceed to:

Paragraph 1: Draw a picture of a light spectrum.
a. Does it look like a rainbow?
b. Why do they call it a rainbow pattern?
c. If you take the orange out, what color will replace it - black or white?

Paragraph 2: Read sentence 1. Look at figure 5.8 and read sentence 1.
a. Does it look like a rainbow?
b. List three things that are the same or different between 5.8 and a rainbow.
1._____
2._____
3._____
c. Don't bother to read the rest of the paragraph.

Paragraph 3: Read the paragraph. Look at figure 6.9 and read the caption.
Draw a picture of what calcium and strontium look like when they are combined.

Paragraph 4: Skip it.

Paragraph 5: Read the first two sentences.
a. Look at your diagram of calcium and strontium.
b. Can you separate your lines for calcium from the whole picture?

This is how scientists can figure out what elements are in a whole mixture of compounds. They are smart enough to remember where all of the lines go. Look at Paragraph 6 and write a ratio of the number of known lines to the total number of lines that have been observed.

Paragraph 7: Read it. Go back to p.116 and read the last paragraph. Write two words that show me you know how these two paragraphs are related.
a._____ b._____

Paragraph 8, 9: These paragraphs give you a science history lesson about how scientists:
a. discovered some new elements 93 mission miles away;
b. discovered 5 new elements that were really small.
What else did Bobby Bunson do? When we look at elements produced in nuclear reactions, why do we have to use spectral analysis?

Paragraph 10: Read it again. Doesn't it make more sense now?

AFTER READING

INSTRUCTIONAL AIDS

AFTER READING . . .

SUMMARIZING

The purpose of summarizing is to have students to think about what they have learned and begin to internalize it. Since this is part of the student's metacognitive development, it is necessary that they, rather than the teacher, do the summary. The teacher should guide them, however, by asking questions for students to answer in oral summaries and providing rules for written summaries.

Rules for Writing a Summary

- Delete trivial material.
- Delete redundant material.
- Group ideas or terms together (e.g., for cats, dogs, goldfish and gerbils, the term "pets" may be substituted).
- Find a topic sentence, or a sentence which states the main idea.
- Make up a topic sentence or general statement if there is none.

THREE MAJOR QUESTION TYPES

(Examples from Health and Physical Education)

The three major question types listed below (literal, inferential and critical) represent a very simple and broad classification of possible question types. There is considerable evidence (Guszak, 1967) to show that teachers tend to use questions that are literal in nature, with the next most frequently used question type being critical. Unfortunately, critical level questions often elicit unsupported opinions rather than carefully thought out judgments or evaluations.

The teacher should attempt to create a balance in the types of questions used in the classroom and to avoid questions that require very little thinking by students. Quite often students are able to respond to questions, especially literal level questions, because the needed information is contained in the question itself.

Questioning strategies can be very effectively used in promoting thoughtful discussion of materials read. By starting with literal level questions--to insure that students have a basic understanding of the materials read--and moving to the inferential and critical levels of questioning, teachers will encourage student interest in and comprehension of class content.

1. *Literal level questions* require the students to locate information stated directly in the text.

Examples:
a. How many major food groups does your text discuss, and what are they?

b. What golf club does the manual suggest for a chip shot to the green?

2. *Inferential level questions* require students to "read between the lines" in order to draw a conclusion not directly stated in the text. This type of question requires students to use their own knowledge as well as information in the text.

Examples:
a. Why do you think experts feel it is important to choose foods from each of the major food groups in creating a balanced diet rather than just taking a vitamin each day?

b. Why do you think protective equipment used in football was changed over the years?

3. *Critical level questions* requires students not only to draw conclusions but to use their judgment, to evaluate, and to state opinions based on factual information.

Examples:
a. What would you say to people to convince them that it is important to have a balanced diet, and what facts would you use to support your argument?

b. Do you believe that football helmets are the source of many serious head injuries and, if so, how and why would you like to see rules or equipment changed?

Adapted and reprinted with permission of NEA, Reading in Health/Physical Education Recreation Class, 1981.

READING TO LEARN

READING TO LEARN ACTIVITIES

1. SQ3R STUDY METHOD

Established by F. P. Robinson, this technique lends itself to almost any reading material. It contains components of before, during, and after reading strategies and is soundly based on an information processing theory of learning. Although research does not support this as a **total** method of improving reading achievement, the value of its component parts has been substantiated.

Often students have been taught the SQ3R technique by the time they reach the junior/senior high school levels. Reinforcement is important at this point, however, because content area texts are constructed differently and students need to see how the SQ3R technique applies to each particular type of text. They must also be convinced of the strategy's worth. One idea is to use the survey technique with the entire class. Once they have seen its value, add the questioning and reading steps. Teachers should model each step of the system, particularly the process of formulating appropriate questions.

Survey Make a quick survey to get an overview of chapter content. Look at the chapter title, the length of the chapter, the headings, charts and diagrams and end of chapter summary and questions. After completing these steps, students should have a feel for the kinds of information covered in that section and the depth of treatment.

Question Look at the first section of the text. If it begins with a subheading, turn it into a question. If pictures, charts and graphs are included, ask what point is being made. Questions may be posed orally or written as a guide to the reader for taking notes.

Read Read material in each section or immediately after the first subheading for answers to the questions. This gives purpose to the reading. Since headings always indicate key ideas, questions based on these will help students identify main ideas. Questions based on illustrations are detail questions.

Recite or Recall Once a section has been read purposefully, students should pause and reflect on their answers. If the question cannot be answered, the student rereads the text. Brief notes may be recorded for later review and study. The reader continues the Question, Read and Recite/Recall steps until the entire text is read.

Review After reading the entire text, students review notes and try to remember main points of the chapter. Later review of notes will be helpful in studying for tests.

2. A PLAN FOR CRITICAL THINKING AND READING

It is important to question and evaluate what is read. The following four steps will help you become a more effective critical reader and thinker.

Step 1: As you read, try to get a general idea of what the author is saying and what the author is trying to persuade you to think.

Step 2: Look for techniques that might lead you to question what the author has said.

a. Does the author show bias?
b. Are the author's ideas based on assumptions?
c. Does the author use any of the techniques of propaganda?
d. Does the author mix facts and opinions?

Step 3: Compare the information you are reading with what you already know or, if you think it is necessary, look for more information in another source.

Step 4: Evaluate what you read. First decide whether the information is useful or important to you. It may not be, in which case you can simply store it in your mind, remembering that you have neither accepted nor rejected it. If it is information that matters to you, you need to evaluate it in terms of what you learned about it in Steps 1 through 3 and decide on one of the following reactions:

a. Accept what the author has told you.
b. Consider what you have read but wait to make a judgment until you have more information.
c. Reject what you have read because your critical thinking has convinced you that the article is not fair or correct (be prepared to defend your own position).

Reprinted with permission of Houghton Mifflin Compant, J. David Cooper, Improving Reading Comprehension, 1986.

3. READING FASTER

1. Previewing

   Benefits:
   - Provides half the comprehension in as little as one tenth the time (i.e., 800 pages can be previewed in an hour).
   - Gives a quick preview of long, difficult and unfamiliar material.
   - Makes it possible to decide which sections are worth a closer look.

   Procedures:
   - Read the first two paragraphs of the chapter.
   - Then read the first sentence of each successive paragraph.
   - Finally, read the last two paragraphs.

2. Skimming

   Benefits:
   - Provides a general idea of light reading in one half the time.
   - Is a good way to review previously read material.

   Procedures:
   - Sweep eyes across each and every line of type, force them to move quickly.
   - Pick up just a few key words in each line.

3. Scanning

   Benefits:
   - Enables a specific fact or piece of information to be found quickly.

   Procedures:
   - Sweep eyes across every line of type.
   - Ignore everything in the reading except the specific information needed (a good example is scanning a list of names in a phone book for one name).

4. Clustering

   Benefits:
   - Increases speed **and** comprehension (most, if not all, of what is read can be understood).

   Procedures:
   - Train eyes to see clusters of three or four words at a time.
   - Reread material at normal speed to see what was missed the first time.
   - Practice 15 minutes each day and the technique might be learned in a week or so. If it takes longer, don't be disappointed.

READING/TAKING TESTS

GENERAL TEST TAKING STRATEGIES

1. Make Good Use of Time

   - Begin work as rapidly as possible.
   - Work so that you are assured a high degree of accuracy.
   - Set up a time schedule so you feel you will finish the test.
   - If necessary, guess at items. Be sure all questions are answered.
   - Use remainder of test time to check answers.

2. Avoid Errors

   - Pay careful attention to all directions.
   - Identify the task to be completed.
   - Decide what kind of response is wanted.
   - Ask examiner for clarification when necessary.
   - Check all answers for accuracy of answer and for correct placement on answer sheet.

3. Use Guessing Strategies

   - Always guess, even if there is a penalty for wrong answers, unless the penalty is severe. (Few tests penalize for a wrong answer).

4. Use Deductive Reasoning Strategies

   - Eliminate options which are known to be incorrect and choose from among the remaining options.

   - Choose neither or both of two options which may imply the correctness of one or the other.

   - Conversely, choose neither or both of two statements, one of which, if correct, would imply the incorrectness of the other.

   - Restrict the choice to those options which include all or two or more given statements known to be correct.

   - Use relevant content information in other test items and options.

Adapted and reprinted with permission of Jackson ESD, Art Phelps, Test Taking Skills; Incorporating Them into the Curriculum, May, 1983.

5. Use test taking strategies appropriate for different types of tests.

A. **Multiple Choice**

- Look for answers that do not fit.
- Look for precise, carefully worded statements.
- Look for answers noticeably longer than others.
- Examine the choices for guidance.

B. **Matching**

- Work from the column with the most information to the one with the least.
- Do those you are sure of first and cross them out.
- Do your hunches second.
- Avoid changing answers.
- As a last resort--guess.

C. **Fill In**

- Watch for how and where to mark answers.
- Capitalize the fill in at the first of the sentence.
- List on a separate paper all of the possible answers; check most likely--eliminate those not likely.
- Clues may be the length or number of the blanks.

D. **Essay**
See Writing Across the Curriculum section, p. 8.

Adapted and reprinted with permission of Creswell School District, Write Away, 1985.

WRITING ACROSS THE CURRICULUM

The writing process is part of the Essential Learning Skills.

Prewriting

Organizing

Selecting Appropriate Form

Drafting

Rewriting/Revising

Editing/Proofing

In addition, writing is basic to most of the other essential skills.

Writing Across the Curriculum . . .

What Research Tells Us

Writing about content helps students learn content better. As students have the opportunity to explore ideas and concepts, a deeper understanding of subject matter develops.

Writing about content pays off in practical application. Students do not write well because they have little opportunity to practice. Because writing skills are important in any academic subject or occupational pursuit, teachers who give their students ample time to write are providing a great service to those students.

Content writing can motivate the reluctant writer. Some students dislike writing and do a poor job because the subject matter lacks interest. Writing about content gives substance to writing.

All language skills can be developed through content writing. Language skills are interactive. Reading, writing, speaking and listening activities take place during a writing assignment.

Just as reading is thinking, so is writing. The writing process involves students in the thinking process. It also allows them to display their work in a manner that stimulates further investigation.

Adapted and reprinted with permission of NEA, Teaching Writing in the Content Areas, 1983.

SELECTED TESTIMONIALS FROM TEACHERS IN CONTENT AREAS

BUSINESS

Writing takes time and effort, but once students see the results of that time and effort, they know that they are learning. Although doubt always accompanies teaching, I know that I am successful as a teacher when students confess that they learned more through my writing assignments than through any other academic activity.

HISTORY

To teach students to think, the teacher should give lots of explicit in-class writing assignments, require multiple drafts, and hold conferences. When giving writing assignments this teacher says, "I don't think of myself as abandoning my responsibility to my field, but as contributing to it. For no matter how much content students are given, it is stillborn if they cannot make sense of it, order it, use, and finally express it."

MATHEMATICS

Can we expect students to apply mathematics if they cannot deal with basic mathematical concepts? Can students effectively use calculators or computers on problems involving several operations if they cannot explain the relationships between these operations and the desired solution?. . .We feel the answer to each of these questions is no. Consequently, we recommend--and have been using--tasks that require students to talk or write about mathematics. Recent personal experience indicates students can write well about mathematics if given practice. More importantly, this practice appears to improve students' learning and performance on traditional tasks.

MUSIC

After asking his voice students to keep a journal or learning log during their practice sessions, this teacher reports that students who keep a record of their practice sessions are much more active learners than those who don't. His students come to the practice sessions with clearly defined questions on problem areas.

SCIENCE

By teaching writing you can actually strengthen students' ability not only to write, but also to read more attentively and to think more logically and rigorously. It is surely no accident that greater lucidity and accuracy in thinking should result form the study of clarity and precision in writing.

Reprinted with permission of Lois Barry, The Busy Professor's Travel Guide to Writing Across the Curriculum, Eastern Oregon State College, January 1984.

SELECTED TESTIMONIALS FROM STUDENTS • • •

KINDS OF WRITING THAT ARE HELPFUL

"Lab reports: because I usually have no idea what I am doing during the lab, but after putting together a report, I understand it much better."

"Those writing assignments that have been **most** beneficial to me are those impromptu ones **assigned and completed** within the same class period. They force you to develop the theme using only the information you might have gleaned from the course. This in turn requires that you use all your skill to present the theme in an understandable, readable manner."

"Group papers are helpful in learning to incorporate new ideas."

"Revising papers, reading others' papers, discussing problems in class, finding out what readers hear and what they think you are missing or what's good."

"Analysis and position papers help me to state my views and/or summaries in a clear way. Otherwise I am a poor explainer. When I have to **write** it down, I understand it better, also."

"Explanation of concepts helps to organize thoughts and express ideas. Rereading them lets me know if I really understand what has been asked of me and if I know what I'm talking about."

"It has helped for me to write statistical information for science classes to get a better grasp of concepts."

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WRITING
TO LEARN

WRITING TO LEARN ACTIVITIES

1. LEARNING LOGS

Over a decade ago, the importance of writing in every classroom was recognized. A common objection raised by classroom teachers was the time necessary to assign and evaluate writing. Recent composition theory, however, supports even more strongly the value of students writing for themselves without the need for teachers to see or formally evaluate the writing. This time honored form of writing, in a journal or learning log, can increase writing fluency, stimulate cognitive growth and reinforce learning. Learning log assignments can be used to encourage student discussion, initiate small group activity, clarify issues and solve problems.

Strategy 1. Teacher writes a question on the board each day before students come in. As they take their seats, students open their journals and write for five minutes, responding to the question. When students finish, the teacher might: (1) save the writings for future use; (2) deal briefly with them (have three volunteers read their responses and lead discussion into the day's lesson); or (3) deal intensely with them (reading each one aloud, then use class time for group revising and rewriting). Regardless of how the writing is used, it points thinking in a specific direction and causes students to investigate what they know (consciously and unconsciously) about the question.

Strategy 2. Learning log writing can be used for closure by allowing five minutes at the end of a day's lesson for students to write their own observations or summaries about what occurred. This gives students a chance to "collect their thoughts" on a subject before going on to something else. It also gives them an opportunity to reconstruct new knowledge--not just reproduce memorized information. The teacher should also write during the last five minutes and share with the class. Not only does this model behavior, but it could be a revelation to the class on how well the class period went in the eyes of the teacher.

Strategy 3. Interrupt a lengthy lecture with a five-minute journal write. For students passively listening, this gives them a chance to get their thoughts back onto the subject. Learning logs are useful if, during lecture, the teacher senses the students are misunderstanding a point. Stopping to write about that point will quickly give the teacher insight into clearing up the misunderstanding.

Strategy 4. Interrupt a discussion with writing to help the discussion change direction, get back on the point, encourage participation by more students. (Having them write their ideas about the point of discussion will show them they do have "something to say" about the subject).

Strategy 5. Use learning logs for problem-solving, with students writing all the way around a problem. The act of writing helps clarify thinking. Solutions to problems are frequently discovered while writing about them.

Strategy 6. Learning logs can occasionally be used for homework assignments. Writing in a learning log requires directed thinking, but stops short of a formal written assignment with accompanying anxieties. In some disciplines such as math or physics, homework questions may be less open ended then ones asked in liberal arts classes, but speculation should still be encouraged. Speculation can be looked at later to document where the student has been and provide a future direction. Participation is encouraged by giving points for turning in assignments rather than grades.

Strategy 7. Keep the learning log as a personalized text for the course with rewritten rules and definitions, explanations of problem solving processes, chapter summaries, current newspaper articles, and copies of passages the student particularly likes. Many students will consider these personal responses to the course worth keeping.

Strategy 8. Arrange readings into several major divisions with six to ten selections in each. After each division, have students write one or two pages in their journal, identifying a unifying theme and supporting their choice with references. This helps them clarify their thinking. The assignment is similar to answering study questions but, since it is a novel approach, students are more likely to take the time to do it.

2. FIRST CONNECTIONS AND RECALL

A short expressive writing following a film or a reading assignment gives students an opportunity to clarify how they feel about the subject and what thoughts come from contact with it. The same type of writing can provide a useful response to a field trip. Instead of the customary step-by-step chronological report, students are asked to respond to a particular part of the field trip--emphasizing feelings and thoughts while interacting with the subject. This approach is used when students select one part of the trip and write a paragraph about it. These paragraphs are combined into a script which matches slides taken during the trip. Students can "perform" their writing for parents.

3. EXPLANATIONS AND DESCRIPTIONS

Writing explanations and descriptions of a procedure are two additional ways writing can serve to clarify thinking. Ask students to explain a cause-and-effect phenomenon or describe how something works. Occasionally ask for writing with vocabulary suitable for a younger student (i.e., "Write a description of how to string a rope through a pulley so your eight-year-old brother could understand how to do it."). Students must clearly understand something in order to change the level of vocabulary--they cannot depend on memorized words/phrases they don't understand.

4. STOPPING FOR A CHECK POINT

Many times teachers don't discover until a final test that the student didn't catch some major concept early in the unit. This can be avoided by stopping for a check point; a brief in-class writing calling for an explanation of a term/concept/relationship. This writing should not be marked or graded, but scanned by the teacher to discover what the student understands. The success of writing check points will depend on how the teacher responds to the writing. The very next lesson should be used to clear up misconceptions, review fuzzy ideas, and discuss areas students obviously didn't understand. This is a situation when writing helps both the student and the teacher learn.

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5. WRITING ANSWERS TO ESSAY QUESTIONS

The recent emphasis on writing and thinking skills has encouraged the use of essay questions . Strategies for answering this type of question include:

- Determine the kind of answer needed.
  - Explain
  - Discuss
  - Analyze
- Determine how much information is required.
- Outline your essay or organize a numbered list.
- Underline important names or ideas, if allowed.
- Use illustrations, if possible.
- Use original examples.
- Include statistics.
- Add no unnecessary information.
- Emphasize quality rather than quantity.
- Discuss all main ideas per paragraph.
- Use vocabulary learned in the course.
- Give reasons for opinions.
- Answer questions completely.
- Outline answers for remainder of questions if you run out of time.
- Reread and correct if you have time.

THE WRITING PROCESS

WHAT IS THE WRITING PROCESS?

PRE-WRITING:

IMAGINATION CREATION

WRITING:

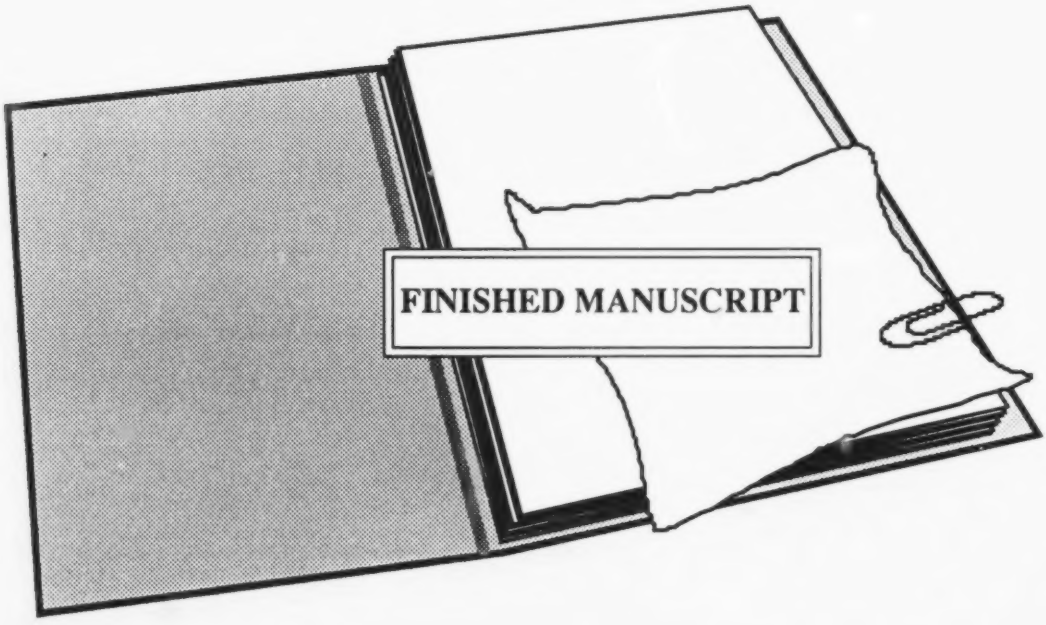
FORMATION CREATION

REWRITING:

EVALUATION CREATION

EDITING/PROOFING:

PERFECTION CREATION



TEACHING THE WRITING PROCESS

A degree in English is not necessary to teach writing in the content areas. Clarity of presentation to a selected audience should be the center of the writing process. Situations should be created which encourage students to write well, using their subject-matter knowledge. Writing successfully involves focusing knowledge, taking a point of view in relation to it, and writing the material with a particular kind of reader in mind. Often school writing assignments only ask the students to repeat facts. When this occurs, they do not focus their writing and become an active part of it. When developing content area writing lessons, the following factors should be considered:

1. *Determine content objectives.* In any content area, the first question is: What do you want students to learn? Because discovery, synthesis, and inquiry make better writing assignments than a repetition of factual materials, use writing assignments at a time you want students to apply learning to a new situation.

2. *Explore objectives through a variety of writing ideas.* The essay and report are the two forms of writing most often used by teachers for writing assignments. These assignments can fail because they do not provide students with enough ideas on how to meet the objectives.

3. *Provide assistance in the writing process.* Often writing assignments are given with very little instruction. Although some changes in writing instruction have occurred as a result of reform movements (writing across the curriculum and process oriented writing), a significant improvement in writing skills has not yet been demonstrated. Because changes are recent, new approaches to instruction may only be superficially understood. They are affecting what students are asked to do (the activities), but are not addressing how students think as they write. Utilizing the forms of writing and techniques outlined on the following pages will help students express their ideas more clearly and accurately in writing. The major benefit to the content area teacher is improvement of learning in their classrooms.

Adapted and reprinted with permission of NEA, Teaching Writing in the Content Areas, 1983.

STEP ONE: PREWRITING

Essential Learning Skills	5.1	Prewriting
	5.2	Organizing
	5.3	Selecting Appropriate Form

Motivation----------->Planning----------->Forms

Observing
Experiencing
Remembering
Responding to:
- Newspapers
- Magazines
- Poems
- Stories
- Plays
- Television
- Film
- Slides
- Tapes
- Records
- Games
- Interviews
- Panels
- Debates
- Creative drama
- Science experiments
- Math problems
- Previous student writing

Word cache
Brainstorming
Class discussion
Group talk
Oral composing
Free association
Talk-write
Quick outlines
Modeling
Story board
Clustering or webbing
Finding audience
Finding form
Free writing

Journals
Diaries
Learning log
Letters
Profiles
Sketches
Reports
Dialog
Radio plays
Video scripts
Editorials
Satire
Plays
Poems
Stories
Books
Posters
Flyers
Ads
Propaganda
Cartoon strips
Epitaphs
Research paper

GO ON . . .

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PREWRITING

Prewriting is one of the most, if not **the** most, important step in the writing process. It provides the motivation for composition and the time to master content, with predictable results in the outcome of the writing experience. The steps in the prewriting process follow. They are not necessarily sequential.

1. Motivation/Experiencing

An experience which creates good writing is one that interests the author and leads to independent expression. The experience might be something unusual; an idea or object shared by a student. It might be a science observation, an activity to extend a basal, a community or national event that impacts on student life, or it might be a brainstorming session. In the experiencing stage, the teacher strives to facilitate students' personal involvement and commitment to their writing topic. Inherent in experience might be one or more of the following:

Observing
Listening
Speaking
Reading
Reflection

2. Planning/Focusing

The student selects a topic. The skills needed are:

Identifying what there is to write about
Gathering information
Analyzing information
Limiting information

3. Making Formal Choices

The final step in prewriting is selecting the format for composition. This process will include:

Organizing ideas and information
Choosing a point of view
Determining an audience
Determining the tone for the writing
Selecting a form of organization

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THE WRITING PROCESS

STEP TWO: WRITING

Essential Learning Skills	5.4	Drafting
	5.6	Rewriting/Revising
	5.7	Editing/Proofing

Drafting----------->Revising----------->Copy-Reading

Rough copy
Conferencing by
    teacher or peer

Reading aloud
Response from:
    teacher
    peer
    small group
    parent
    other adult
Formative
    evaluation
Focus on:
    content
    purpose
    audience

Self-proofing
Editing group
Sentence
    combining
Skills center
Focus on:
    spelling
    punctuation
    usage
    handwriting
    format

GO ON . . .

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DRAFTING

The student must be allowed to write, write, write. Writing is an uncertain, messy, exploring process. Introduce the idea of the rough draft. In the beginning stage of writing, fluency and frequency of writing are stressed over correct form.

Be flexible. Consider that not all students will compose in the same way. Writing is a very personal, individual experience.

- Allow talking and sharing.
- Give students options regarding form, length and topic.
- Allow students the freedom of rewriting or starting all over again.
- Not all writing projects need to be followed up by rewriting and editing/proofreading.
- Write with the students as often as possible and share these writings with them.
- Monitor progress and provide assistance for students who are "stuck" in the process.

Assign Group Papers - One approach to educating students about the essential techniques of writing a paper is to assign a group paper. It's been estimated that eighty percent of the work in the business world is discussed and directed by committee. The opportunity for students to cooperate and accommodate to a group's decisions will teach them more than how to improve their research and writing skills.

If a group of five or six students is given an assigned topic and an hour to plan the dividing of responsibility for writing the paper, they will almost always (especially if you arrange to have a least one fairly adept writer in each group) create the following division of labor:

1. Brainstorm, then narrow the topic and create a thesis;
2. Make up an outline with four or five sub-topics based on suggestions from the group;
3. Each member of the group (with one exception) chooses a sub-topic to research and write up;
4. The remaining member of the group (usually the one who narrowed the topic and created the thesis) is responsible for creating transitions and for final proofreading of the paper.

If group papers are presented to the class by the entire group for critique and evaluation, students won't feel threatened because they have a built-in support group. In addition, the group paper is a sufficiently unusual assignment to suspend some of students' predictable anxieties about writing. After working on a group paper, students will write individual papers with a great deal more confidence than they might otherwise bring to the assignment. In a business adaptation, groups of students can form consulting corporations to prepare major business reports for hypothetical clients. Not only do students produce much better group reports than the individual reports they previously handed in, but they fill out personnel evaluation reports on each group member's participation in the process, thus practicing another management skill. After each group's paper is complete, the other groups critique each report according to carefully outlined criteria.

Adapted and reprinted from Creswell School District, Write Away, 1985 and Lois Barry, The Busy Professor's Travel Guide to Writing Across the Curriculuim, Eastern Oregon State College, January, 1984.

REWRITING/DRAFTING

The revising stage allows the students to scrutinize their writing through sharing. Students have one indispensable skill. They know when they don't understand something. That ability is a prime asset for responding to each other's papers. They only need to learn how to ask the right questions. To help students respond to each other's papers, you may need to "talk through" a portion of a duplicated paper with them, showing that you **like** well developed paragraphs and precise word choices and have **questions** about missing transitions and unclear relationships.

Revision can be done by student partners, in student groups or during a conference with the teacher. Before pairing students, it is advisable to encourage small groups of students to observe an individual teacher-student conference. The teacher models the process for students to use when working with a partner.

Steps in revision should be positive, non-threatening experiences for the student. Revising should concentrate on moving ideas around, adding additional information and deleting repetitious material, **not** surface correctness of the manuscript. By providing some class time for peer responses, you will **not** be taking valuable time away from course content. If students are investigating and writing about different aspects of the material, they will certainly benefit from reading other students' research. Why should the teacher be the only one to read all that information? After all, you already know most of it, the students don't.

Revision is a praising, questioning, and polishing process.

TECHNIQUES FOR REVISING

1. Self-revision - students review their paper.
2. Teacher and student revision - together
3. Group revision - two to four students use steps demonstrated by teacher.
    - Each student reads the paper quitely alone.
    - Writer tells what purpose was, i.e., to inform? to entertain? describe? etc.
    - Writer reads own paper orally.
    - Revising process:
        - Editors tell something positive
        - Editors give helpful hints and ask questions
4. Rough copy is revised and rewritten by the author.

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EDITOR FEEDBACK FORM

Editor's Name_____ Date:_____

Assignment:_____ Period:_____

PART I.

1. Write your immediate reaction to the paper.

2. Give at least one positive comment. What is one thing you really like about this paper?

3. What one thing does the writer needs to work on for his/her rewriting in order to make the paper more interesting or more comprehensible?

PART II. CHECKLIST

	low				high
1. Organization: stick to the main idea; logically arrange pro and con arguments	1	2	3	4	5
2. Completeness: adequately develop each point to insure reader understanding	1	2	3	4	5
3. Coherence: make smooth and logical transitions from one segment to the next.	1	2	3	4	5
4. Use of quotations: choose most effective quotations to support arguments; most logical placement.	1	2	3	4	5

PART III. OVERALL EVALUATION

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SELF-EVALUATION OF WRITING

The following questions form the basis for self-evaluation procedures throughout the year.

1. (After the first evaluation) What did you try to improve, or experiment with, on this paper? How successful were you? If you have questions about what you were trying to do, what were they?

2. What are the strengths of your paper? Place a squiggly line beside those passages you feel are very good.

3. What are the weaknesses, if any, of your paper? Place an X beside passages you would like your teacher to correct or revise. Place an X over any punctuation, spelling, usage, etc., where you need help or clarification.

4. What one thing will you do to improve your next piece or writing? Or what kind of experimentation in writing would you like to try? If you would like some information related to what you want to do, write down your questions.

5. (Optional) What grade would you give yourself on this composition? Justify it.

Because students become tired of the same questions, teachers need to vary them from week to week, adding questions related to the current work of the class.

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EDITING/COPY-READING

It is very important to introduce concerns for mechanics (spelling, punctuation, sentence structure) **late** in the writing process. **After** drafting and revising, the teacher can have the student work on spelling and usage errors, providing necessary guidance. Students should learn to take responsibility for final correctness of copy.

Content must be maintained as the primary focus of the writing exercise with work on mechanics introduced gradually. Every error need not be marked on a paper. It is too time consuming for the teacher and degrading to the student. Only errors occurring regularly in student work could be the one chosen to address. See p. 22 for other alternatives to red pencil evaluation.

CORRECTION SYMBOLS

The district has adopted a set of correction symbols for correcting written work. Use these as appropriate for different grades. The full list is intended for the high school level.

c or c	error in use of capital letters
p	error in punctuation
or sp	error in spelling
F or frag	sentenced fragment
ss	error in sentence structure
awk	awkward sentence
nc	not clear
gr	error in grammar
ww	error in word choice
ro	run-on sentence
¶	new paragraph here
no ¶	no new paragraph here
tense	error in tense
○	you have omitted something
agr	agreement
usage	error in usage
abb	error in abbreviation
red. or rep	redundant or repetitious

THE WRITING PROCESS

STEP THREE: POST WRITING

Presentation----------->Evaluation

Private writing
Shared reading
Bulletin board
Letters
Books
Class newspaper
School magazine
Letter to editor
Literary contest
Author fair
Professional publication

Summative evaluation
Holistic scoring
Primary trait assessment
Analytical assessment
Grades
Alternatives (see page 22)

YOU'RE DONE!!

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PRESENTATION

Some writing is private and not intended for publication. Learning logs and practice writing fall into this category.

Selected writing deserves to be dignified and shared with an audience. Students need the opportunity to choose their best efforts for sharing. Sharing emphasizes the importance of the writer and builds self-esteem. In sharing, students learn from each other . It also motivates them to put their best efforts into the writing and editing process.

It is the role of the teacher to provide many ways of sharing finished work. Students enjoy choosing from numerous options, styles which fit their individual topics and personalities.

Other ways of sharing:

- Read it to others
  in the class
  in the school
  in other classes
  at home
- Roll it up into a scroll and give it to someone special
- Record it on tape
- Publish it in the class or school newspaper
- Display it in a store window
- Change it into drama and put on a play
- Memorize it and recite it
- Find or produce a piece of art to match the theme
- Contribute to a class book
- Ditto copies for others
- Bind it in a book. The librarian may be able to show you ways to make simple books. A young author's collection may be added to the library.

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ALTERNATIVES TO RED PENCIL EVALUATION

When evaluating student writing, it is helpful to remember that students do make progress in writing by writing frequently and receiving positive feedback. Teachers should point out to students the areas in which progress is occurring. Rejoice in progress - don't revel in correction - particularly in the beginning.

- Use selected writings from student folders to evaluate long-term growth.
- Conference with individual or small groups of students to strengthen their specific writing skills with focus on content.
- Select competent students to act as class editors.
- Grade a paper for only one or two particular skills (spelling, complete sentences, clear development of main idea, good use of details, etc.)
- Allow the student to select one paper out of a set for teacher evaluation.
- Give a grade or points for making an effort or for completing the assignment, rather than grading for specifics.
- Correct only the first ten errors; place a double line (//) where you stop marking errors.
- Use **pencil** in commenting on student papers.
- Indicate the successful parts of a paper by writing a small "g" in the margin with a tail extending down the page beside the good writing.
- Have **students** identify what they liked best in their papers. This allows the teacher to be especially attentive when reading those passages. It accomplishes two things: (1) lets the teacher know which parts of the essay students consider their best work, and (2) forces students to read critically for passages that deserve special attention. If none can be found, that, in itself, should tell them something.

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